

DOCKET NO: 263493US0PCT

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :  
JOHANN BONN, ET AL. : EXAMINER: METZMAIER, D. S.  
SERIAL NO: 10/519,405 :  
FILED: JANUARY 5, 2005 : GROUP ART UNIT: 1796  
RCE FILED: FEBRUARY 15, 2008  
FOR: DEFOAMING AGENT AND/OR :  
DEAERATORS FOR AQUEOUS MEDIA  
TENDING TO FOAM

APPEAL BRIEF

COMMISSIONER FOR PATENTS  
ALEXANDRIA, VIRGINIA 22313

SIR:

This is an appeal of the Final Rejection dated September 22, 2008 of Claims 1, 3-9, 16 and 18-22. A Notice of Appeal is **submitted herewith**.

I. REAL PARTY IN INTEREST

The real party in interest in this appeal is BASF SE, having an address at 67056 Ludwigshafen, Germany.

II. RELATED APPEALS AND INTERFERENCES

Appellants, Appellants' legal representative and the assignee are aware of no appeals, interferences, or judicial proceedings which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

III. STATUS OF THE CLAIMS

Claims 1, 3-9, 16 and 18-22 stand rejected and are herein appealed. Claims 12-15 stand withdrawn from consideration. Claims 2, 10, 11 and 17 have been canceled.

IV. STATUS OF THE AMENDMENTS

An amendment under 37 CFR 1.116 was filed on November 19, 2008. Since the Examiner, in a telephone interview with undersigned attorney on November 17, 2008 indicated that such an amendment would be entered, the CLAIMS APPENDIX attached herewith shows the appealed claims as so amended.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

A summary of the claimed subject matter, as claimed in independent Claims 1 and 20, is mapped out below, with reference to page and line numbers in the specification added in **[bold]** after each element.

Claim 1: An antifoam and/or deaerator based on an oil-in-water dispersion comprising an oil phase **[page 3, lines 24-25]** of at least one hydrophobic compound **[page 4, lines 15-16]** and an aqueous phase which comprises at least one stabilizer, water and, optionally, a thickener, **[page 3, lines 33-35]** wherein the oil-in-water dispersion comprises a combination of

component (i) at least one polyglyceryl ester which is obtained by at least 20% esterification of polyglycerol with a carboxylic acid of 12 to 36 carbon atoms and

component (ii) at least one bisamide of ethylenediamine and carboxylic acids of 10 to 36 carbon atoms, **[page 3, lines 35-42]**

wherein the hydrophobic compound is selected from the group consisting of the alcohols of at least 12 carbon atoms, [page 3, line 26] mono-, di- and triglycerides of fatty acids, [page 27, line 28] fatty acid esters of carboxylic acids of at least 12 carbon atoms and monohydric to tetrahydric alcohols of 1 to 24 carbon atoms, [page 28, line 30] 3-thiaalkan-1-ols, 3-thiaoxoalkan-1-ols, 3-thiadioxoalkanols, esters of the thiaalkane compounds and mixtures thereof, [page 3, lines 31-33] and

wherein the dispersion excludes fatty acids of 12 to 26 carbon atoms [page 3, line 31] and alkoxylated fatty alcohols [page 3, line 27].

Claim 20: An antifoam and/or deaerator based on an oil-in-water dispersion comprising an oil phase [page 3, lines 24-25] of at least one hydrophobic compound [page 4, lines 15-16] and an aqueous phase which comprises at least one stabilizer, water and, optionally, a thickener, [page 3, lines 33-35] wherein the oil-in-water dispersion comprises a combination of

component (i) at least one polyglyceryl ester which is obtained by at least 20% esterification of polyglycerol with a carboxylic acid of 12 to 36 carbon atoms and

component (ii) at least one bisamide of ethylenediamine and carboxylic acids of 10 to 36 carbon atoms, [page 3, lines 35-42]

wherein the hydrophobic compound is selected from the group consisting of alcohols of at least 12 carbon atoms [page 3, line 26] and 3-thiaalkan-1-ols, [page 3, line 31] and wherein the dispersion excludes fatty acids of 12 to 26 carbon atoms. [page 3, line 31]

## VI. GROUNDS OF REJECTION

### Ground (A)

Claims 1, 3-9, 16 and 18-22 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

### Ground (B)

Claims 1, 3-9, 16 and 18-22 stand rejected under 35 U.S.C. § 112, second paragraph, as indefinite.

## VII. ARGUMENT

### Ground (A)

Claims 1, 3-9, 16 and 18-22 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. The rejection is untenable and should not be sustained.

Claim 1 recites, *inter alia*, “wherein the dispersion excludes fatty acids of 12 to 26 carbon atoms and alkoxylated fatty alcohols.” Claim 20 recites, *inter alia*, “wherein the dispersion excludes fatty acids of 12 to 26 carbon atoms.” Both the species alkoxylated fatty alcohols, and fatty acids of 12 to 26 carbon atoms, are disclosed as applicable species for the hydrophobic compound recited in each of these claims, of which there is no issue. Relying on the precedent of *In re Johnson*, 558 F.2d 1008, 194 USPQ 187 (CCPA 1977), Applicants submit that the above-excerpted recitals from Claims 1 and 20 are supported by the description requirement.

The Examiner’s stated rationale for the rejection is that both components (i) and (ii) of the claims require a reaction product of a particular compound with a carboxylic acid having

a carbon chain length which at least overlaps with the fatty acids recited as excluded from the dispersion, and that because “the ester (i) and amide (ii) formation are both equilibrium reactions that are expected to have a yield that is difficult and/or impossible to drive to 100% completion, some fatty acid would be present in the composition.” The Examiner thus finds that *Johnson* “is not deemed to be controlling in the instant fact situation since applicants did not contemplate compositions that excluded fatty acids of 12 to 26 carbon atoms.”

In reply, the Examiner is ignoring the specific language in the claims. Both Claims 1 and 20 recite that component (i) is at least one polyglycerol **ester** and that component (ii) is at least one **bisamide**. It is the claim language that must be controlling and the claims do **not** recite that the starting carboxylic acid reactant for component (i) and for component (ii) be in excess or otherwise present in unreacted form. Indeed, component (i) is recited as the ester being obtained “by at least 20% esterification of polyglycerol” with the carboxylic acid, indicating that the only excess contemplated for component (i) is the polyglycerol.

The Examiner further finds that there is no descriptive support for the species *alkoxylated fatty alcohols of 12 to 26 carbon atoms*.

In reply, the claims are to be given their broadest reasonable interpretation consistent with the specification. As described in the specification, alkoxylated fatty alcohols, and fatty acids of 12 to 26 carbon atoms, are described as two separate species. It would be clearly understood, prior to filing the above-discussed amendment, that the term “of 12 to 26 carbon atoms” at the end of each of Claims 1 and 20 modified only the recited fatty acids, and not both the alkoxylated fatty alcohols and the fatty acids. Nevertheless, the above further finding would now appear to be moot in view of the above-discussed amendment.

For all the above reasons, it is respectfully requested that this rejection be REVERSED.

Ground (B)

Claims 1, 3-9, 16 and 18-22 stand rejected under 35 U.S.C. § 112, second paragraph, as indefinite. The rejection is untenable and should not be sustained.

The Examiner finds that it is unclear from the term “wherein the dispersion excludes alkoxylated fatty alcohols and fatty acids of 12 to 26 carbon atoms” whether the term “of 12 to 26 carbon atoms” modifies only “fatty acids” or both the term “alkoxylated fatty alcohols” and “fatty acids.”

In reply, Claim 1 has been amended by the above-discussed amendment such that it ends with the term “wherein the dispersion excludes fatty acids of 12 to 26 carbon atoms and alkoxylated fatty alcohols.” Thus, it is clear that the term “of 12 to 26 carbon atoms” modifies only “fatty acids.”

In addition, while the Examiner has included Claims 20-22 in the rejection, the term in issue does not appear in these claims.

For all the above reasons, it is respectfully requested that this rejection be REVERSED.

VIII. CONCLUSION

For the above reasons, it is respectfully requested that all rejection be REVERSED.

Respectfully submitted,

Customer Number

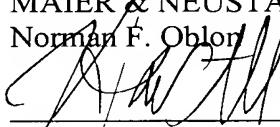
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CLAIMS APPENDIX

Claim 1: An antifoam and/or deaerator based on an oil-in-water dispersion comprising an oil phase of at least one hydrophobic compound and an aqueous phase which comprises at least one stabilizer, water and, optionally, a thickener, wherein the oil-in-water dispersion comprises a combination of

component (i) at least one polyglyceryl ester which is obtained by at least 20% esterification of polyglycerol with a carboxylic acid of 12 to 36 carbon atoms

and

component (ii) at least one bisamide of ethylenediamine and carboxylic acids of 10 to 36 carbon atoms,

wherein the hydrophobic compound is selected from the group consisting of the alcohols of at least 12 carbon atoms, mono-, di- and triglycerides of fatty acids, fatty acid esters of carboxylic acids of at least 12 carbon atoms and monohydric to tetrahydric alcohols of 1 to 24 carbon atoms, 3-thiaalkan-1-ols, 3-thiaoxoalkan-1-ols, 3-thiadioxoalkanols, esters of the thiaalkane compounds and mixtures thereof, and

wherein the dispersion excludes fatty acids of 12 to 26 carbon atoms and alkoxylated fatty alcohols.

Claim 3: An antifoam and/or deaerator as claimed in claim 1, wherein the hydrophobic compound is selected from the group consisting of the alcohols of at least 12 carbon atoms, mono-, di- and triglycerides of fatty acids, fatty acid esters of carboxylic acids of at least 12 carbon atoms and monohydric to trihydric alcohols of 3 to 22 carbon atoms, 3-thiaalkan-1-ols, 3-thiaoxoalkan-1-ols, 3-thiadioxoalkanols, esters of the thiaalkane compounds and mixtures thereof.

Claim 4: An antifoam and/or deaerator as claimed in claim 1, wherein the weight ratio of (i) polyglyceryl esters to (ii) bisamides is from 10 : 1 to 1 : 10.

Claim 5: An antifoam and/or deaerator as claimed in claim 1, wherein the weight ratio (i) polyglyceryl esters to (ii) bisamides is from 3 : 1 to 1.5 : 1.

Claim 6: An antifoam and/or deaerator as claimed in claim 1, wherein the oil phase comprises at least one fatty alcohol with 12 to 26 carbon atoms in the molecule, at least one glyceryl ester of fatty acids of 12 to 26 carbon atoms and at least one mineral oil.

Claim 7: An antifoam and/or deaerator as claimed in claim 1, wherein the amount of the hydrophobic phase of the oil phase in the composition of the oil-in-water dispersion is from 5 to 60% by weight and the amount of the aqueous phase is from 95 to 40% by weight.

Claim 8: An antifoam and/or deaerator as claimed in claim 1, wherein the oil-in-water dispersion contains from 0.1 to 50% by weight of said at least one polyglyceryl ester.

Claim 9: An antifoam and/or deaerator as claimed in claim 1, which contains ethylenebisstearamide as bisamide (ii).

Claim 16: An antifoam and/or deaerator as claimed in claim 1, wherein the polyglycerol used to make the polyglyceryl ester is obtained from a mixture of diglycerol, triglycerol, tetraglycerol and polyglycerols having a higher degree of condensation.

Claim 18: An antifoam and/or deaerator as claimed in claim 7, wherein the amount of the hydrophobic phase of the oil phase in the composition of the oil-in-water dispersion is from 10 to 50% by weight.

Claim 19: An antifoam and/or deaerator as claimed in claim 7, wherein the amount of the hydrophobic phase of the oil phase in the composition of the oil-in-water dispersion is from 10 to 35% by weight.

Claim 20: An antifoam and/or deaerator based on an oil-in-water dispersion comprising an oil phase of at least one hydrophobic compound and an aqueous phase which comprises at least one stabilizer, water and, optionally, a thickener, wherein the oil-in-water dispersion comprises a combination of

component (i) at least one polyglyceryl ester which is obtained by at least 20% esterification of polyglycerol with a carboxylic acid of 12 to 36 carbon atoms and

component (ii) at least one bisamide of ethylenediamine and carboxylic acids of 10 to 36 carbon atoms,

wherein the hydrophobic compound is selected from the group consisting of alcohols of at least 12 carbon atoms and 3-thiaalkan-1-ols, and

wherein the dispersion excludes fatty acids of 12 to 26 carbon atoms.

Claim 21: An antifoam and/or deaerator as claimed in claim 20, wherein the hydrophobic compound comprises at least one alcohol of at least 12 carbon atoms.

Claim 22: An antifoam and/or deaerator as claimed in claim 20, wherein the hydrophobic compound comprises at least one 3-thiaalkan-1-ol.

EVIDENCE APPENDIX

None.

RELATED PROCEEDINGS APPENDIX

None.